Canine IL-1 beta / IL1B Protein

Catalog Number: 70018-DNAE

General Information

Gene Name Synonym:

IL1B

Protein Construction:

A DNA sequence encoding the mature form of canine IL1B (Q28292) (Ala 115-Ser 266) was expressed, with an initial Met at the N-terminus.

Source: Canine

Expression Host: E. coli

QC Testing

Purity: > 96 % as determined by SDS-PAGE.

Bio Activity:

Measured by its ability to induce Interferon gamma secretion by human natural killer lymphoma NK-92 cells. The ED50 for this effect is 0.2-1ng/mL.

Endotoxin:

Please contact us for more information.

Predicted N terminal: Met

Molecular Mass:

The recombinant canine IL1B consists of 153 amino acids and has a calculated molecular mass of 17.6 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Formulation:

Lyophilized from sterile 20mM PB, 0.3M NaCl, pH 6.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

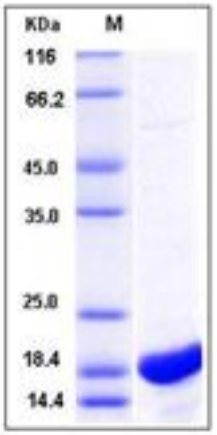
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Interleukin-1 beta (IL1 beta or IL1B) also known as catabolin, is a member of the interleukin 1 cytokine family. IL1 is a pleiotropic cytokine. It is involved in the inflammatory response, cell growth, and tissue repair in the cortex. The IL1 superfamily consists of three members, IL1A (IL1 alpha), IL1B (IL1 beta), and IL1 receptor antagonist (IL1Ra). In clinical, it has been reported that Interleukin (IL)-1 may influence Th1 / Th2 immune responsiveness and has been implicated in the establishment of a successful pregnancy. Proinflammatory interleukin (IL)-1 gene polymorphisms associated with high levels of IL-1beta activity increase the risk for hypochlorhydria and distal gastric carcinoma. IL1B polymorphisms may be involved in susceptibility to SSc. Moreover, the IL2-384-G allele may be a marker for the limited phenotype of systemic sclerosis (SSc).

References

1.Kim SH, *et al.* (2008) Association of -31TC and -511 CT polymorphisms in the interleukin 1 beta (IL1B) promoter in Korean keratoconus patients. Mol Vis. 14:2109-16. 2.Wang ZC, *et al.* (2002) T helper 1-type immunity to trophoblast antigens in women with a history of recurrent pregnancy loss is associated with polymorphism of the IL1B promoter region. Genes Immun. 3(1): 38-42. 3.Mattuzzi S, *et al.* (2007) Association of polymorphisms in the IL1B and IL2 genes with susceptibility and severity of systemic sclerosis. J Rheumatol. 34(5): 997-1004.